# Human Health Hazards

# Chemical Emergency Preparedness and Response

This fact sheet is intended to help public health professionals and the general public understand chemical terrorism and prepare for accidents involving hazardous chemicals.

#### What is chemical terrorism?

Chemical terrorism is the intentional use of a toxic chemical to scare, injure, or kill people. Although rare, chemical attacks have occurred in the past. In 1995 the nerve gas Sarin was released in a Japanese subway. This attack killed several people and sickened hundreds more.

A terrorist could use a toxic chemical to poison the air, water or food supply. His methods may be as simple as opening a container in an enclosed space, spraying toxins on a food supply, or poisoning a water reservoir.

## What should I do if I suspect a chemical attack/event?

- Stav calm.
- Evacuate the area if it is safe to do so.
- Do not touch or remove anything.
- Call 911 and be ready to provide:
  - ✓ Your name, agency and telephone number
  - ✓ The type, date and time of incident
  - ✓ The facility name and/or location of incident
  - ✓ Any other pertinent information
- Follow first responders' instructions about what to do and where to go.
- If you suspect that you have been contaminated with a chemical or are experiencing symptoms that cause you to believe you may have been exposed to a chemical you may obtain further advice via the State's Poison Control Center at 1-800-222-1222.

# How can I prevent a chemical attack/event?

Be aware of your surroundings. Call 911 or your local law enforcement to report suspicious or unusual activity.

# How will I recognize a chemical attack/event?

Terrorists rarely warn their intended victims prior to an attack. An attack may not result in mass casualties and there may be no obvious signs such as odors or visible chemicals in the area. The first indication that an attack has occurred may be an unusual number of sick people or animals in a localized area.

#### What is the difference between harmful chemical and biological exposures?

Most chemical agents cause immediate symptoms. Biological agents cause illnesses that onset after an incubation period of several hours or days. People sickened by biological agents may be dispersed over a large area before they develop any symptoms of illness. Once sickened,

they may transmit the illness to others causing a cascade of illnesses in a widespread population. Illnesses caused by chemicals cannot be transmitted to another person.

# Some other important items to remember about chemical attacks/events

- Symptoms such as burning eyes, cough, nausea, or disorientation are usually immediate.
- There may be obvious physical signs such as an unusual colored residue, a distinct odor. Look for dead plants, insects, and animals in the area.
- Some chemicals alter your sense of smell. Don't assume that the chemical has dissipated if you no longer notice an odor.
- Animals, children, and the elderly may be more sensitive than healthy adults.

# How can I prepare for a possible attack/event?

If you are a public health official, study your county's emergency plan and be sure that you understand your role. In the event of an attack, you may be called on to organize people and materials in accordance with that plan. You may also be asked to interview victims or provide backup to "first responders" and medical staff. The general public should be aware of the terrorism threat and be prepared to evacuate in an emergency by becoming familiar with exits and evacuation routes.

#### Who are the first responders?

"First responders" are specially trained hazardous materials (HAZMAT) teams, fire fighters, police, and emergency medical technicians. They will control access to the affected area(s), prevent the spread of contaminants, find and treat the injured, and collect criminal evidence.

### What should I look for if I suspect an attack/event?

In the environment, watch for an unusual number of sick or dead animals, lack of insect activity, or dead vegetation. An acrid or sweet odor, the presence of an oily film on surfaces or a low-hanging foggy cloud can be signs that a chemical agent has been released.

In humans, look for an unusual number of symptoms or deaths in a small area. Symptoms can range from skin irritation and blistering, to nausea, disorientation, coughing, convulsions and death. In an outdoor setting, the injured are likely to be downwind from the release.

#### What are the health effects of hazardous chemicals?

Chemicals favored for use by terrorists can cause a wide range of symptoms. While most chemicals cause immediate symptoms, delayed effects are possible. A terrorist may release more than one chemical in an attack. For more information, see CDC's list of chemical agents: <a href="http://www.bt.cdc.gov/Agent/agentlistchem.asp">http://www.bt.cdc.gov/Agent/agentlistchem.asp</a>

#### For more information

For health related information, contact the Wisconsin Division of Public Health, Bureau of Environmental Health, 1 West Wilson St, Box 2659, Madison, WI 53701-2659, (608) 266-1120 or online at http://www.dhfs.state.wi.us/eh.

